



DEMAND AND PROMO PLANNING

KS.IBP ECOSYSTEM

Solutions for Integrated Business Planning





OBJECTIVES

- > Automate the demand forecasting and sales planning processes.
- > Increase company profitability by improving forecast accuracy.



TASKS

- > Automated baseline generation.
- > Configuration of the consensus forecast process.
- > Accuracy monitoring across multiple planning levels.
- > Scenario analysis and sales plan approval.
- > Selection of the optimal supplier of raw materials and components.
- > Consideration of demand-impacting factors.

4 ADVANTAGES AND KEY FEATURES

Use of Advanced Technologies

- Full end-to-end decision traceability – evaluate accuracy across factors and planners
- AI/ML-driven forecasting for smarter planning

Easy Solution Integration

- Effortless integration with your existing infrastructure and systems
- Seamless compatibility with KS.IBP products

Scalability and Performance

- Robust scalability with consistently high performance, regardless of data volume
- Support for a large number of users

Integration Builder

- Certified specialists with extensive project implementation experience
- Automated data updates, on schedule or in real time

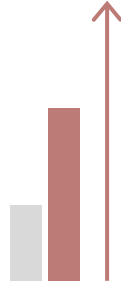


DP

5 IMPLEMENTATION IMPACT

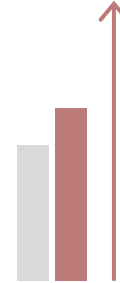
+3–7%

Revenue growth



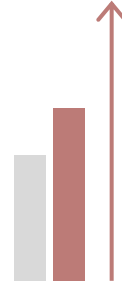
+5–15%

Enhanced forecast accuracy



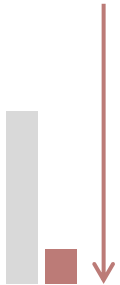
+30–40%

Increased efficiency of planning teams



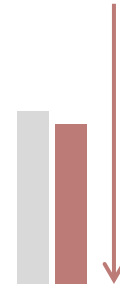
-50–70%

Reduced forecast cycle time



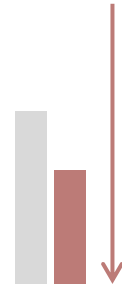
-2–5%

Accelerated capital turnover



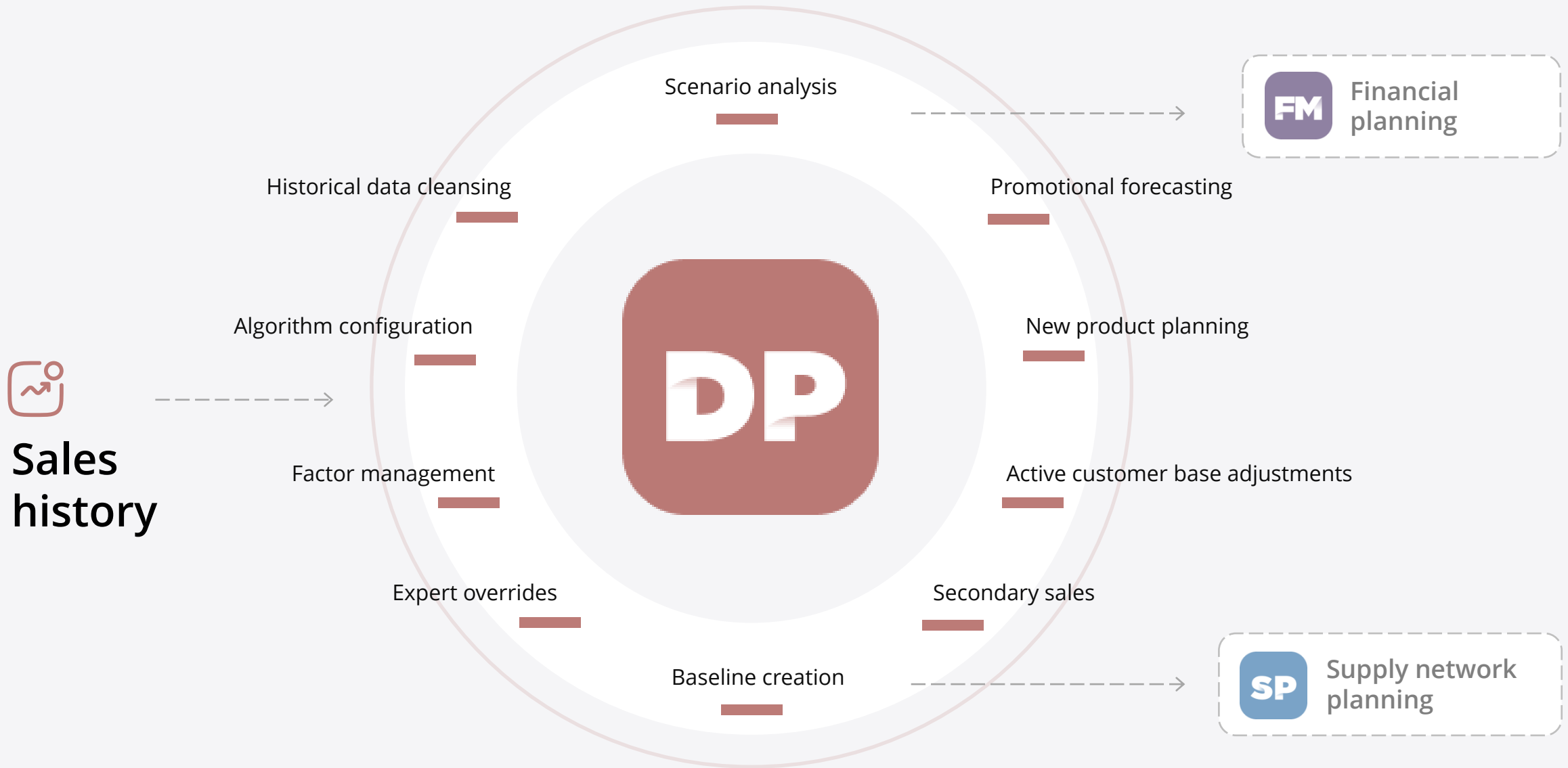
-20–35%

Minimized lost sales

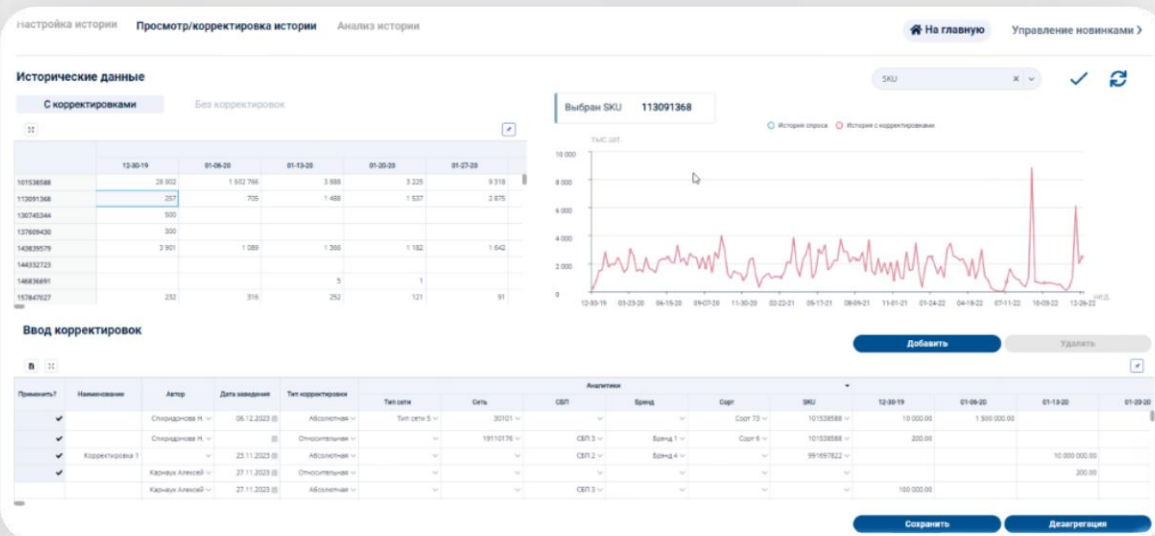


Expected initial outcomes: within 1–2 weeks for operational planning and 3–6 weeks for tactical planning

6 SUPPLY CHAIN PLANNING



7 DEMAND FORECASTING



Historical Data Processing

- Automated handling of historical data: demand reconstruction and outlier smoothing
- Incorporation of past factors (including promotions)
- Time series clustering using ML algorithms

Sales Forecasting

- Statistical and ML-based models
- Flexible configuration of forecasting levels
- Forecast model ensemble

Assortment Planning

- Lifecycle status management for products
- Forecasting of absolute and relative new items
- Forecast management for discontinued products

Regular Demand Planning

- Configurable planning granularity and horizon
- Manual adjustments and factor management at any aggregation level
- Automated disaggregation tools
- Alerting mechanisms and proactive warning management

PROMO Planning

- Manual setup of promotional activities
- AI/ML-based forecasting of future promo effects
- Impact assessment and evaluation of promo influence on the final sales plan



Planning Based on Secondary Sales

- Forecasting secondary sales
- Distributor inventory analysis
- Conversion of secondary sales into primary sales

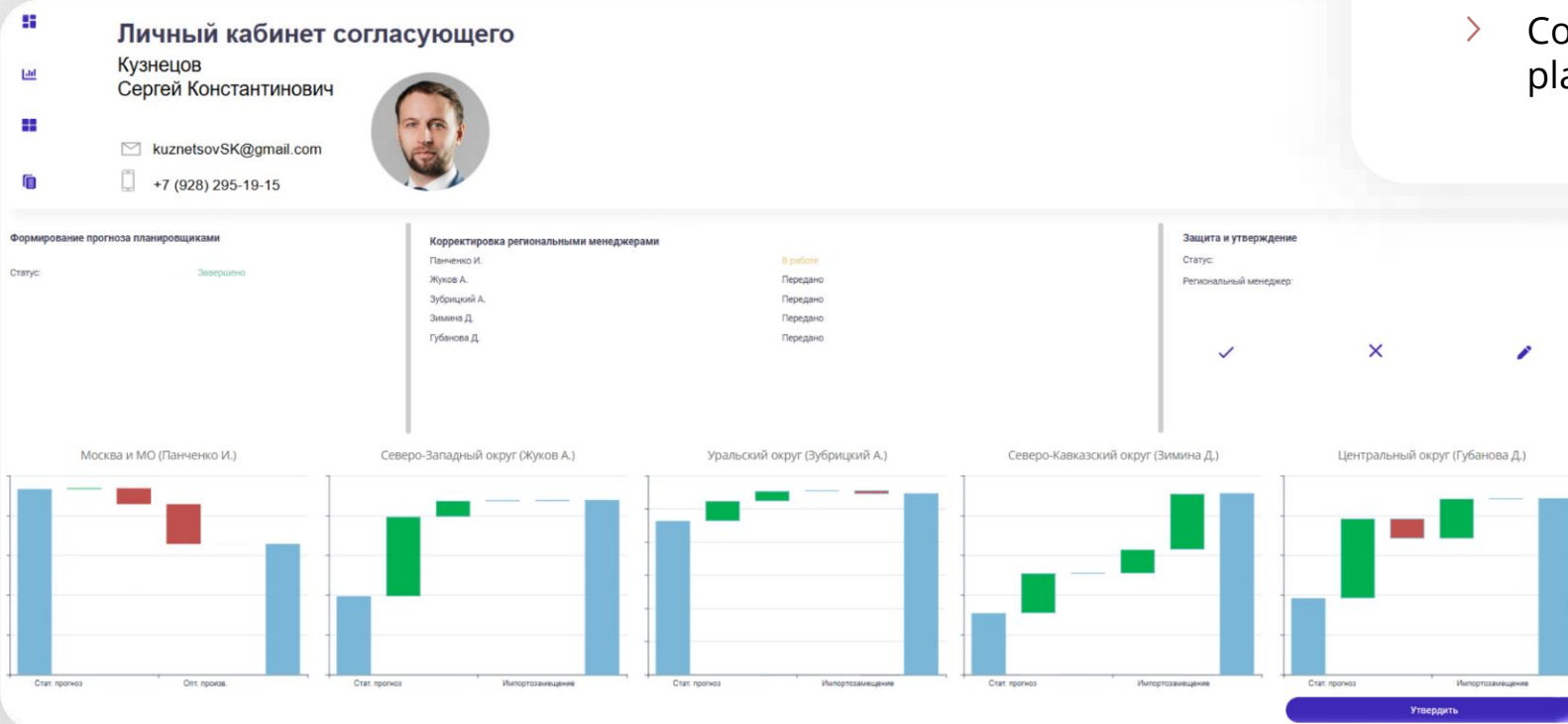
9 COLLABORATIVE PLANNING

Collaborative Planning Tools

- Unlimited number of forecast scenarios
- Configurable business workflow (baseline calculation, adjustments, alignment, approval)
- Built-in comments, chats, tasks, and notifications

Reporting and Alignment

- Scenario analysis powered by built-in BI tools
- Integration with external BI systems and export of planning results
- Accuracy monitoring at every stage of the planning cycle
- Consolidation and approval of the sales plan



Data Processing and Historical Cleansing Algorithms

- Outlier detection and cleansing
- Shortfall restoration
- Processing of historical events and promotions



Accuracy Assessment and Automated Algorithm Selection

- Methods for evaluating forecast accuracy and automatically selecting the best algorithm
- Automated forecast quality assessment with recommendation of the most suitable algorithm

Classical Forecasting Algorithms

- Simple methods (smoothing, averages)
- Autoregressive models (ARIMA)
- Seasonal/trend models (Holt-Winters)



DP

Integration Builder

- By user groups
- By product/factory/route groups



11 INTERFACE EXAMPLES

Личный кабинет согласующего

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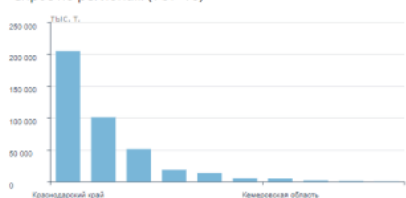


Новое задание на согласование

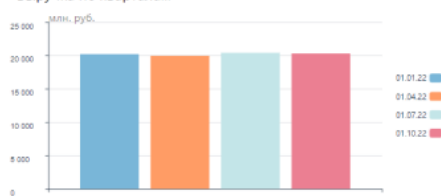
Выручка по регионам России (TOP-10)



Спрос по регионам (TOP-10)



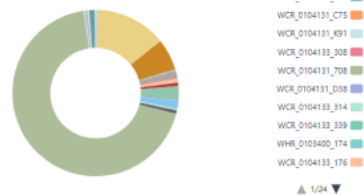
Выручка по кварталам



Точность прогноза региональных менеджеров



Выручка по продуктам (TOP-10)



Факторы корректировки прогноза



Настройка параметров прогноза

Уровень агрегации по географии: Регион

Уровень агрегации по клиенту: Сегмент

Уровень агрегации по продукту: Продукт

Уровень агрегации по направлению продаж: Канал сбыта

Период прогнозирования: Месяц

Горизонт прогнозирования: 09.06.2023

Период анализа с: 31.01.2020

Период анализа по: 15.08.2023

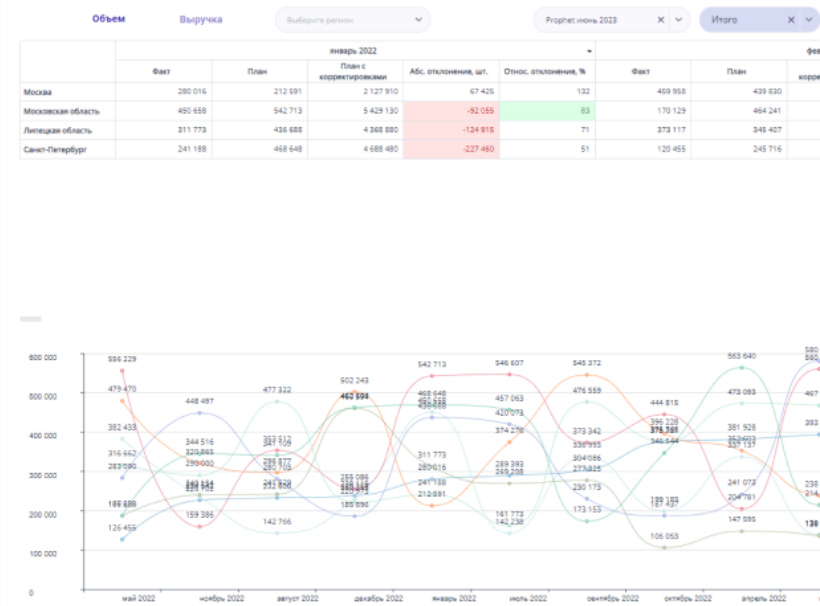
Длина верификационного интервала, мес.: 5

Стат. модель: ARIMA

Запуск прогнозирования

Результаты прогнозирования

Статус загрузки данных



Верификация прогноза

Период прогнозирования: Месяц

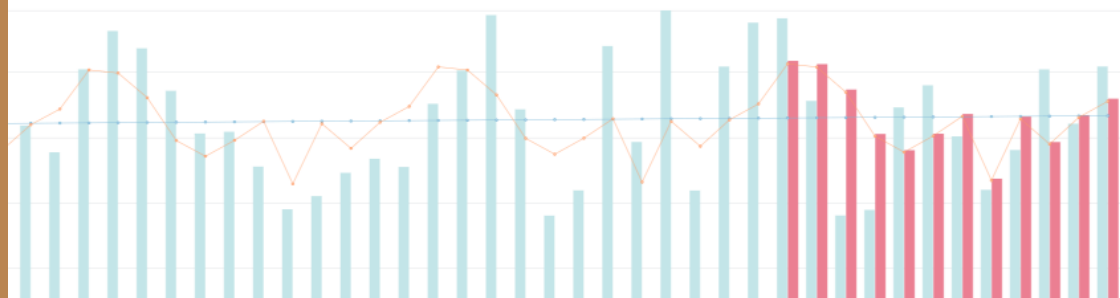
Период анализа с: 01.01.2020

Период анализа по: 31.12.2022

Верификационный интервал, мес.: 5

BMSE: 220.24

Генератор



Анализ сценариев прогноза

По компании

	Базовый					Алгоритмический					Комплексный				
	MSE	RMSE	MAPE	SMAPE	V	MSE	RMSE	MAPE	SMAPE	V	MSE	RMSE	MAPE	SMAPE	V
Чеченская республика	48 505.66	220.24	55.40	105.96	✓	48 505.66	220.24	55.40	105.96	✓	48 505.66	220.24	55.40	105.96	✓
Астраханская обл.	55 681.84	235.97	105.96	105.96	✓	55 681.84	235.97	105.96	105.96	✓	55 681.84	235.97	105.96	105.96	✓
Республика Северная Осетия - Алания	1 062.76	32.60	86.81	86.81	✓	1 062.76	32.60	86.81	86.81	✓	1 062.76	32.60	86.81	86.81	✓
Кабардино-Балкария	10 481.66	102.38	92.93	92.93	✓	10 481.66	102.38	92.93	92.93	✓	10 481.66	102.38	92.93	92.93	✓
Кемеровская область	55 681.84	235.97	105.96	105.96	✓	55 681.84	235.97	105.96	105.96	✓	55 681.84	235.97	105.96	105.96	✓
Краснодарский край	1 062.76	32.60	86.81	86.81	✓	1 062.76	32.60	86.81	86.81	✓	1 062.76	32.60	86.81	86.81	✓
Москва	1 062.76	32.60	86.81	86.81	✓	1 062.76	32.60	86.81	86.81	✓	1 062.76	32.60	86.81	86.81	✓
Республика Татарстан	10 481.66	102.38	92.93	92.93	✓	10 481.66	102.38	92.93	92.93	✓	10 481.66	102.38	92.93	92.93	✓
Новосибирская область	55 681.84	235.97	105.96	105.96	✓	55 681.84	235.97	105.96	105.96	✓	55 681.84	235.97	105.96	105.96	✓
Ульяновская область	1 062.76	32.60	86.81	86.81	✓	1 062.76	32.60	86.81	86.81	✓	1 062.76	32.60	86.81	86.81	✓
Новгородская область	10 481.66	102.38	92.93	92.93	✓	10 481.66	102.38	92.93	92.93	✓	10 481.66	102.38	92.93	92.93	✓
Удмуртская область	1 062.76	32.60	86.81	86.81	✓	1 062.76	32.60	86.81	86.81	✓	1 062.76	32.60	86.81	86.81	✓
Владимирская область	10 481.66	102.38	92.93	92.93	✓	10 481.66	102.38	92.93	92.93	✓	10 481.66	102.38	92.93	92.93	✓

Параметры сценариев

	Горизонт	Стат. модель	История		Уровень агрегации при формировании прогноза		
			начало	окончание	Продукт	Клиент	География
Базовый	09.06.2023 (3)	SARIMAX	31.01.2020 (3)	15.08.2023 (3)	Вид материалов	Итого	Регион
Алгоритмический	30.06.2023 (3)	ARIMA	01.01.2020 (3)	31.12.2022 (3)	Вид материалов	Сегмент	Регион
Комплексный	30.06.2023 (3)	Non-Window	01.01.2020 (3)	31.12.2022 (3)	Вид материалов	Сегмент	Регион

Результат консолидации сценариев





KNOWLEDGE
SPACE

Thank you!

If you have any questions,
we'll answer them.

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Commercial Director



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